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09/808,584	03/14/2001	John R. Jacobson	55559USA6A	3434
32692	7590	05/24/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			EDWARDS, LAURA ESTELLE	
			ART UNIT	PAPER NUMBER
			1734	
DATE MAILED: 05/24/2006				

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/808,584
Filing Date: March 14, 2001
Appellant(s): JACOBSON ET AL.

MAILED
MAY 24 2006
GROUP 1700

Allison Johnson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 4/17/06 appealing from the Office action mailed 11/18/05.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

A. Whether claims 1-9, 19-24, 29-31, 35, and 57 are patentable under 35 U.S.C. 103(a) over Jonkers (US 4,299,164) in view of Jaffa et al (US 5,501,147)?

B. Whether claims 32-34 are patentable under 35 U.S.C. 103(a) over Jonkers (US 4,299,164) in view of Jaffa et al (US 5,501,147) as applied to claim 19 and further in view of Kirk Othmer?

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(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 4,299,164 JONKERS November 1981

US 5,501,147 JAFFA ET AL March 1996

KIRK OTHMER ENCYCLOPEDIA OF CHEMICAL TECHNOLOGY,

4th Edition, Volume 20, "Radiation Curing", pages 832-834 (1996)

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-9, 19-24, 29-31, 35, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonkers (US 4,299,164) in view of Jaffa et al (US 5,501,147).

Jonkers teaches a coating or screen printing apparatus comprising an applicator roll or cylinder (3), a conveyor (not shown, see area of travel P) for transporting a web or sheet to the applicator, and a squeegee device including a metering bar (4) having a fixed or stationary arcuate end (see col. 5, lines 14 to col. 6, lines 10) positioned against the applicator to meter a predetermined amount of coating material to the applicator for transfer to the web or sheet transported to the applicator by the conveyor, wherein the metering bar forms a nip with the applicator via exertion of force generated by a hose (25) against the bar against the applicator, the predetermined amount of coating material being determined, in part, by the amount of force exerted upon the metering bar at the nip. Even though Jonkers do not illustrate a conveyor for sequentially feeding a web or sheet to the screen printing applicator, it was known in the art at the time the invention was made, to utilize an endless conveyor belt system to convey the sheet

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or web to a screen printing apparatus as evidenced by Jaffa et al (see col. 5, lines 66 to col. 6, lines 1-5). It would have been obvious to one of ordinary skill in the art to utilize an endless conveyor belt system as taught by Jaffa et al in the Jonkers screen printing apparatus in order to transport the web or sheet into and out of the screen printing apparatus.

With respect to the hardness of the applicator, while neither Jonkers nor Jaffa et al set forth the hardness value of the applicator roll, it is within the purview of one skilled in the art to make the screen printer applicator of an appropriate material having a desired hardness in so long as the applicator roll enables transfer of the coating to the web or sheet with a high resistance to wear.

With respect to the apparatus being enabled for articles of different dimensions, including lengths, the apparatus as defined by the combination would enable a continuous web, serrated web, or discrete sheet to be screen printed because of the use of an endless conveyor type system.

With respect to the radius of the end of the metering bar, even though neither Jonkers nor Jaffa et al set forth such a value, Jonkers illustrates in Figs. 3, 4, and 6, various radii for the arcuate end of the metering bar such that it is within the level of ordinary skill in the art to determine the appropriate radius dimension of the end so as to meter the predetermined amount of coating material on the web or sheet.

With respect to the force applied to the metering bar, Jonkers recognizes the use of an appropriate pressure to maintain a constant nip angle (see col. 4, lines 41-54).

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With respect to the apparatus defined by the combination above screen-printing coating composition onto the side of a roll of tape, the apparatus would enable such a coating process via sandwiching of the roll of tape on its side between the conveyor belt and the applicator roller.

With respect to the screen printing apparatus including a drying or solidifying station, while Jonkers does not suggest drying of the wet printed web or sheet via an adjacent drying or solidifying station, Jaffa et al recognize such conventional use of a drying station downstream of the screen printing apparatus to dry the web or sheet (col. k, lines 56+). It would have been obvious to one of ordinary skill in the art to provide a drying or solidifying station downstream of the Jaffa et al screen printing apparatus to provide for a dry finished screen printed product.

With respect to the use of plural endless belts to transport the web or sheet from the screen-printing apparatus to the drying station, see Jaffa et al wherein plural endless conveyors connect the screen-printing section of the apparatus with the drying section.

Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonkers (US 4,299,164) and Jaffa et al (US 5,501,147) as applied to claim 19 above, and further in view of Kirk Othmer.

The teachings of Jonkers and Jaffa et al have been mentioned above but neither teach or suggest a dryer in the form of a radiation source. However, Kirk Othmer recognizes the use of some type of drying or curing type system (see DRYING SYSTEMS, pages 422-425 and RADIATION CURING, pages 832-834) to ensure proper application of a coating to the substrate or article without a detrimental effect on the end product (see bottom of page 422). In the event of use of the screen printing apparatus as defined by the combination above with a

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radiation curable coating composition and in order to enable the composition to dry, it would have been obvious to one of ordinary skill in the art to utilize any known source of radiation following coating of the article in order to provide a dry finished coated product. Furthermore, it is within the purview of one skilled in the art to use any known and conventional source for drying or curing a given coating composition to effect a dry product.

(10) Response to Argument

Appellant contends that Jonkers fails to teach or suggest an applicator to which a coating composition is metered and from which the coating composition is transferred to an article such that the Examiner has failed to establish a prima facie case of obviousness.

This argument is not deemed persuasive in that Jonkers provides for an applicator or stencil roller (3) through which coating material is metered via metering bar (4) for transfer onto the web or sheet in contact with the surface of the stencil roller. The presently claimed applicator as recited in claim 1 does not exclude the applicator from being a screen or stencil type roller applicator. Therefore, a prima facie case of obvious has been established via the combined teaches of Jonkers and Jaffa et al.

Appellant contends that neither Jonkers nor Jaffa et al teach or suggest the applicator roller having a Shore A hardness no greater than 50. While this argument is well taken, it is the Examiner's view that the mere claim of Shore A hardness of the applicator roller would be insufficient grounds to grant patentability in that a determination of the appropriate hardness of the applicator would be within the purview of one skilled in the art in so long as the transfer of coating material to the article (i.e., web or sheet) results. One of ordinary skill in the art would

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appreciate the selection of an appropriate hardness of the applicator roller for the purposes of enhanced durability or resistance to wear of the applicator with a given product or article.

Appellant contends that there is no teaching, suggestion, or motivation in the art to configure the apparatus taught by Jonkers and Jaffa et al to enable an edge face of a roll of tape to be coated between the conveyor and applicator. This argument is well founded, however, the capability of the routineer in the art to configure the apparatus combined by Jonkers and Jaffa et al to apply coating material to a thicker sheet or web would be no different from the claimed invention in that an edge face of a roll of tape, the tape being laid on its side, would be coated with coating material. The only face of a roll tape that could not be coated with the apparatus of Jonkers and Jaffa et al would be the outer peripheral surface of the tape because then the tape would no longer be planar to be sandwiched between the applicator roll and the conveyor belt.

Appellant contends that Jonkers does not teach or suggest an applicator that includes a roller but really teaches a curved stencil or squeegee. This argument is not deemed persuasive because it is well known and conventional in the coating and/or printing art that a rotary screen printing apparatus as disclosed by Jonkers includes a rotary cylindrical screen or rotary applicator (3). The part of the screen or applicator shown by Jonkers is a partial view of the whole rotary cylindrical screen. Jonkers shows more of the peripheral surface of the cylindrical screen in Fig. 10. One of ordinary skill in the art would readily recognize the rotary cylindrical screen to read on an applicator roller because it is round or cylindrical, rotates, and applies coating material to the web or sheet in contact therewith.

Appellant contends that a prima facie case of obviousness has not been established against claim 19 more less claims 32-34 because of reasons refuted above with respect to Jonkers

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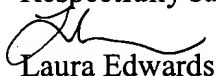
not teaching an applicator with the additional argument that Jonkers does not teach or suggest a metering bar that includes a fixed arcuate end positioned against the applicator to meter a predetermined amount of coating composition to the applicator for transfer to an article. This argument is not deemed persuasive because of reasons mentioned above where it has been established by the Examiner that Jonkers does teach an applicator or applicator roll (3) which applies coating material to the web or sheet. As for the metering bar being fixed, again Jonkers suggests or implies that the metering bar (4) has an arcuate fixed end as evidenced by (see col. 5, lines 14 to col. 6, lines 10).

(11) Related Proceeding(s) Appendix


No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


Laura Edwards

Conferees:

Chris Fiorilla  SPF AU 1734

Steven Griffin 